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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,825	10/17/2005	Peter Gutendorf	KRO-10202/36	3926
25006 7590 04/01/2008 GIFTORD, KRASS, SPRINKLE, ANDERSON & CITKOWSKI, P.C PO BOX 7021 TROY, MI 48007-7021				
EXAMINER MORROW, JASON S				
ART UNIT		PAPER NUMBER		
3612				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/531,825

## Applicant(s)

GUTENDORF ET AL.

## Examiner

Jason S. Morrow

## Art Unit

3612

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7, 11-14, 18 and 22-28 is/are rejected.
- 7) ☒ Claim(s) 8-10, 15-17 and 19-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
- Paper No(s)/Mail Date 5/12/06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it uses the phrase "is disclosed" in line 1. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 5 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the output signals" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In claim 12, line 2, the word “several” is indefinite. The scope of what is claimed by the word is unclear.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-7, 11-14, 18, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boisvert et al. (US Paten Application Publication 2002/0121872) in view of Weber et al. (US Patent 6,600,284).

Re claim 28, Boisvert et al. discloses a motor vehicle with a movable closure comprising control equipment (see paragraph 0037) for controlling movement of the closure, and a detection device (see paragraph 0047) for recognizing an intervention into the range of motion of the closure, the detection device including a sensor system having a plurality of sensors operating according to different measurement principles, the control equipment being operable, when a problem is recognized with the detection device or in the event of an intervention situation, to control the convertible top in a safety mode during which the convertible top motion continues with reduced speed and power or is stopped or reversed (it is stopped or reversed, see paragraph 0117).

Re claim 2, an optical sensor system is provided (see paragraph 0047).

Re claim 3, the optical sensor system includes an optical light emitting and receiving device which forms at least one light plane around the range of motion of the closure and detects an intervention into the light plane with the aid of a reflection detection medium (see paragraphs 0047-0050).

Re claim 4, a laser is used as the light source of the light emitting and receiving device (see paragraph 0047)

Re claim 5, an electronic analysis unit which uses the output signals of the reflection detection medium to calculate the distance and/or the angle of an intervention into the light plane is provided (see paragraphs 0047-0050).

Re claim 11, the sensor system includes at least one capacitive sensor (see paragraph 0050).

Re claim 18, the sensor system includes at least one sensor for detecting the power consumption of a top drive, which is connected to an electronic analysis unit, by means of which an intervention situation can be detected by comparing the present current flow to a characteristic change in the current flow or by using mathematically calculated intervention criteria (see paragraph 0117).

Re claim 22, the reaction whether to continue the closure movement with reduced speed or to stop or reverse the closure motion takes place in relationship to the intervention obstruction that is being recognized (see paragraph 0117).

Re claim 23, after an automatic start of the convertible top movement an inquiry function is started for a fault in the detecting device or for detecting an intervention situation (the system checks for an intervention situation).

Re claim 24, a continuous closure position recognition is provided to monitor the position of the closure, which determines the position of a defined element of the closure using an acceleration sensor, which measures an actual acceleration in relationship to the acceleration of free fall (see paragraph 0208).

Re claim 25, several acceleration sensors are located on elements of the closure and are connected to an electronic analysis unit, which uses the signals of the acceleration sensors to calculate a relative position, which, together with the present information on the vehicle incline, results in the present closure position (see paragraph 0208).

Re claim 26, the control equipment for the control of the closure motion is equipped with a further acceleration sensor that is used to detect the vehicle's inclination (see paragraph 0208).

Re claim 27, the sensor system includes a rain sensor (see paragraph 0040).

Boisvert et al. does not disclose the closure being a convertible top.

Weber et al. teaches that convertible tops are closures which benefit from the use of obstacle detection devices.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify a closure, such as that disclosed by Boisvert et al., to be a convertible top, as

taught by Weber et al., in order to apply the sensor system to a device which requires and would benefit from such a device (see Boisvert et al. paragraph 0012)

Boisvert and Weber et al., as applied above, do not disclose at least one light plane being formed on a side of the convertible top mechanism facing a passenger compartment, at least one light plane being formed on a side of the convertible top mechanism facing the outside of the vehicle, at least one capacitive sensor is used to recognize an intervention situation being located in the area of elements that are connected with hinges of a convertible top linkage and/or a tensioning bow and/or a convertible top compartment cover and/or a windshield frame and/or an area next to a window, or the capacitive sensor that is used to recognize an intervention situation being located between a sealing section and/or a trim part and its support.

The examiner takes Official Notice that the use of sensors in places where moving parts of a vehicle can accidentally pinch or crush a human body is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify a vehicle, such as that disclose by Boisvert and Weber et al., to have at least one light plane is formed on a side of the convertible top mechanism facing a passenger compartment, at least one light plane formed on a side of the convertible top mechanism facing the outside of the vehicle, at least one capacitive sensor used to recognize an intervention situation being located in the area of elements that are connected with hinges of a convertible top linkage and/or a tensioning bow and/or a convertible top compartment cover and/or a windshield frame and/or an area next to a window, and the capacitive sensor that is used to recognize an intervention situation being located between a sealing section and/or a trim part and its support,

as is old and well known in the art, in order to protect a vehicle passenger from accidentally injured.

Boisvert and Weber et al., as applied above, do not disclose the use of several capacitive sensors for detecting an intervention situation.

The duplication of the parts of an invention is old and well known in the art.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a motor vehicle, such as that disclose above, to have several capacitive sensors for detecting an intervention situation, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. See *In re Harza*, 124 USPQ 378 (CCPA 1960).

#### ***Allowable Subject Matter***

8. Claims 8-10, 15-17, and 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Helms et al., Eisenreich et al., Dangl et al., O'Connor et al., Gutendorf, Breed et al., Gifford et al., Pribisic, Donahue et al., Hofers et al., and Wells disclose vehicle sensor systems.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason S. Morrow whose telephone number is (571) 272-6663. The examiner can normally be reached on Monday-Friday, 8:00a.m.-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason S. Morrow/  
Primary Examiner, Art Unit 3612

March 28, 2008